## **Conservative Therapy of Benign Uterine Bleeding**

## With Special Reference to the Use of Ergot

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IT HAS LONG BEEN RECOGNIZED that many types of functional uterine hemorrhage or excessive bleeding of benign origin, whatever the cause, are frequently controllable by conservative treatment or minor surgical procedures. Yet there seems to be a tendency to resort to hysterectomy or irradiation without giving adequate trial to simpler measures.

Some of the common causes of excessive bleeding of benign origin are myomas and polyps, chronic cervicitis and endocervicitis, subinvoluted or atonic uterus, either postpartal or postabortal with or without adherent placental tissue, hyperplastic or polypoid endometrium, endocrinologic dysfunction, pelvic inflammatory disease, adenomyosis, endometriosis and the presence of some kinds of ovarian neoplasms. Of these causes, probably the most common are myomas and polyps, with submucous myomas and endometrial polyps the most likely to cause abnormal bleeding — usually excessive flow during menstrual periods.

Apparently there are some physicians and many laymen who believe that mere proof of the presence of a myoma in the uterus, even though it cause no symptoms, makes major operation imperative. Almost daily, gynecologists consult with patients who have already been advised by the referring physician that hysterectomy probably should be done immediately. It is not uncommon for the patient to say that some mention has been made of the likelihood of present or future malignant change. And once suspicion of that possibility has been aroused, very few women can calmly accept advice for other than surgical treatment.

Sarcomatous change is, in fact, exceedingly uncommon and usually warning is given by a sudden increase in the size of the tumor. Certainly it does not occur often enough to warrant indiscriminate removal of the uterus in every case in which there is a fibroid tumor in the organ. (This does not apply, of course, if the tumor is larger than a fetus in the fourth month or is obviously causing pressure symptoms owing to size or location.)

Like other observers, 1-3 the authors believe in a conservative approach—generally in watchful waiting and, if there is excessive bleeding, application of all known means to control it in the hope of avoid-

• Although operation frequently is carried out in cases of excessive uterine bleeding of benign origin, particularly if fibrous tumor is present, in many cases major surgical intervention could be averted by adequate conservative therapy.

The authors have given Ergotrate® over long periods with good results in many cases and have noted no severe side effects. If this therapy fails, diagnostic dilatation and curettement sometimes reveals and removes the cause of bleeding.

If infection is a factor, use of sulfonamides or antibiotics sometimes has dramatic effect.

ing operation. If conservative therapy is successful, the uterus is preserved for women who wish to have children, and for others the bleeding may be kept in control through the menopause when natural cessation of bleeding and involution of fibroid tumors takes place. Morover, if hysterectomy ultimately becomes necessary, a physician who has obviously tried to avoid it is more likely to have his advice followed when he recommends operation.

In cases in which extraordinary bleeding is not a complaint but small myomas are noted in the course of examination done routinely or in connection with some minor complaint, the physician should tell the patient of the condition, explain that she need not be fearful, let her know that operation probably will never be necessary, advise her to have examinations every six months and meanwhile to report any unusual symptoms promptly. If excessive bleeding is the chief complaint, however, and myomas are present and the uterus moderately enlarged, conservative therapy is indicated. Only if all other measures are ineffectual should operation be considered.

The authors have given Ergotrate<sup>®</sup> in many cases of bleeding of benign origin, sometimes continuing treatment for long periods, with good results.

Ergot has been commonly used by physicians for many years, chiefly in the treatment of postabortal or postpartal bleeding. But in general the drug has been employed with trepidation and to limited degree for short periods, probably owing to unfounded statements in early textbooks regarding toxic effects, the development of gangrene of the extremities and other dire sequelae of long-continued administration. Certainly the value of the drug in the treatment of benign functional bleeding and bleeding caused by the presence of fibroid growths has been almost entirely overlooked.

One of the authors in more than forty years of administration of ergonovine maleate in adequate dosage for long periods has yet to observe gangrene or other serious effect from use of it. Occasionally a patient appears not to tolerate the drug, but in such cases there is only nausea or some other mild symptom that abates when treatment is discontinued; and in many instances the therapy can be resumed later without ill effect. Rarely, severe cramping follows each dose of ergonovine maleate; if it does, a submucous polyp must be suspected and use of the drug discontinued.

The dosage should be varied to fit the requirements in each case. The authors usually start with one 0.2 mg. tablet of Ergotrate<sup>®</sup> (1/320 grain) by mouth four times daily throughout the menstrual period. Then, depending upon the response, the dosage is adjusted. If there is no response or it is slow, the dosage is increased in amount—say to 0.4 mg. (1/160 grain) — and in frequency of administration. Sometimes in severe cases it may be necessary to begin giving the drug several days before the first day of the period. In cases of severe bleeding, other measures should also be carried out-rest in bed, application of an ice cap to the lower part of the abdomen, prescription of diet and of supplementary vitamins, administration of hematinic agents and treatment of blood dyscrasia if present. If the cervix is eroded or if cervicitis or endocervicitis is present, appropriate treatment must be given.

This therapy is not always effective, and even when it is, the desired results are not always obtained immediately. Ordinarily, improvement increases with each menstrual period and the amount of bleeding does not approach normal until treatment has been continued through four or five periods. As bleeding diminishes, the dosage may be reduced. In many instances fibroid formations appear to decrease in size during therapy.

The same general regimen often is effective also in treatment of benign bleeding owing to other causes — postpartal and postabortal bleeding, the bleeding of ovarian dysfunction and functional menorrhagia.

When the treatment described is not effective and myomas or other etiologic factors cannot be demonstrated, further search must be made for the cause and other means of therapy employed. Sometimes diagnostic dilatation and curettement may at once reveal and remove the cause—perhaps a remnant of placental tissue, or endometrial hyperplasia or polyps

in the cervical canal. Often in cases of endocervicitis, as evidenced by swelling and patency of the cervical canal with profuse bleeding upon contact, administration of sulfonamides or antibiotics has dramatic results. Occasionally in such cases it may be necessary to strip the cervical canal with a very fine cautery tip, gently and carefully lest trauma cause stricture. In a surprising number of cases excessive bleeding will abate with effective treatment of chronic cystic cervicitis, cervical infection or hypertrophy of the cervix with Nabothian cysts. When cervical stenosis is the cause of bleeding, as it frequently is, dilatation is sometimes of benefit. It can be carried out in a physician's office with topical anesthesia.

Occasionally when bleeding does not diminish with administration of Ergotrate alone, the authors use a compound of Ergotrate, 0.2 mg., cotarnine chloride, 95.0 mg., and cottonroot bark, 95.0 mg., put into a capsule and given every 3 to 4 hours as necessary. This seems to have additional effect but it increases the cost of medication.

The authors are opposed to the use of estrogenic hormones<sup>2-4</sup> in cases of excessive bleeding, particularly in the presence of myomas or adenomyosis, on the ground that the patient may already have overgeneration of female sex hormones. And although they have had but limited experience with the use of androgens, the results observed have been very disappointing—no improvement or very short-lived benefit when the hormone was given in recommended dosage.

Believing that there is rarely if ever justification for destruction of ovarian tissue in the therapy of benign bleeding, the authors consider irradiation warranted only for malignant conditions. Since patients differ in degree of radiosensitivity, what might appear to be a relatively innocuous dose in one case might have very severe effect in another. In addition, there may be undesirable side effects such as cystitis, proctitis, or premature menopausal symptoms as a result of ovarian damage. Delayed effects many years after radium therapy have been observed, cervical stricture quite commonly. It is felt that when conservative therapy is not effective, vaginal hysterectomy is preferable to irradiation even though the patient be a poor surgical risk.

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## REFERENCES

- 1. Frank, R. T.: Operative vs. nonoperative procedures for uterine fibroids, J.A.M.A., 140:1001, July 23, 1949.
- 2. Greenblatt, R. B.: The management of functional uterine bleeding, Med. Clin. of North Amer., 34:1551, Sept. 1950.
- 3. Payne, F. L.: The treatment of uterine fibroids, Surg. Clin. N. Amer., 28:1445, Dec. 1948.
- 4. Schumann, E. A.: Postmenopausal vaginal bleeding, West. J. Surg., Gynec. & Ob., 60: 49-52, Feb. 1952.